## Abstract

Graft polymeric membranes and methods for making graft polymeric membranes have one or more trifluorovinyl aromatic monomers that are radiation graft polymerized to a polymeric base film. The membranes comprise a polymeric base film to which has been graft polymerized substituted  $\alpha, \alpha, \beta$ -trifluorostyrene and/or  $\alpha, \alpha, \beta$ -trifluorovinylnaphthylene monomers, which are activated towards graft polymerization. As ion-exchange membranes, the membranes are suitable for use in electrode apparatus, including membrane electrode assemblies in, for example, fuel cells. The membranes can also be crosslinked.